

USSN 09/408,716  
Attorney Docket No. 01413.0011-00000

**AMENDMENTS TO THE CLAIMS:**

**The following listing of claims replaces all prior versions and listings of claims in this application:**

1. (Currently Amended) A method of interactively displaying a set of records and their associated attributes, comprising:

defining a set of graphic images, wherein each graphic image represents a range of values;

generating a first visual representation, the first visual representation being a surface map of the set of records with (1) graphic images, representing a plurality of attributes associated with each record in the set, arranged along a first dimension, and (2) the records, represented by a collection of graphic images, arranged along a second dimension;

generating a second visual representation of a plurality of the records in the set;

displaying the first surface map and second visual representations such that they appear on a display simultaneously;

receiving input from a user selecting a subset of the records from the first surface map; and

altering the second visual representation to highlight the selected subset simultaneously with displaying the first visual representation, wherein the graphic images are color-coded blocks.

2. (Canceled)

3. (Previously Presented) The method of claim 1, wherein the second visual representation is a galaxy view.

4. (Original) The method of claim 1, wherein the records are ordered into groups.

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5. (Original) The method of claim 4, wherein the groups are ordered based on statistical correlation.

6. (Original) The method of claim 1, wherein the order of display of the attributes associated with the records is based on statistical correlation.

7. (Original) The method of claim 1, wherein the order of display of the attributes associated with the records is based on cluster analysis.

8. (Previously Presented) The method of claim 1, further comprising analyzing an index to determine if one or more of the records in the selected subset is shown in the second visual representation.

9. (Original) The method of claim 1, further comprising generating a dendrogram to indicate relationships between records.

10. (Original) The method of claim 1, further comprising:  
determining a text-based identification of the record represented in the selected portion of the first surface map; and  
displaying the text-based identification.

11. (Canceled)

12. (Currently Amended) A computer-implemented method of interactively displaying records and their corresponding attributes, comprising:  
providing a surface map of the set of records with (1) graphic images, representing a plurality of attributes associated with each record in the set, arranged along a first dimension, and (2) the records, represented by a collection of graphic images, arranged along a second dimension, said surface map representing a set of records; and  
providing a set of views for simultaneous display;

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linking the surface map to ~~a~~the set of views, wherein at least one of the views comprises a visual representation of a plurality of the records in the set;  
receiving an input signal selecting a portion of the surface map; and  
indicating, in a view linked to the surface map, ~~at least one~~ a plurality of the records corresponding to the selected portion simultaneously with the displaying the set of views.

wherein the graphic images are color-coded blocks.

13. (Currently Amended) A method of interactively displaying a set of records and their corresponding attributes, comprising:

defining a set of graphic images, wherein each graphic image represents a range of values and the graphic images are color-coded blocks;

generating a first visual representation, the first visual representation being a three-dimensional surface map with (1) each record in the set arranged along a first dimension, (2) graphic images, representing a plurality of attributes associated with the records, arranged along a second dimension, and (3) the values associated with the attributes arranged along a third dimension;

generating a second visual representation of a plurality of the records in the set;  
displaying simultaneously the surface map and the second visual representation;  
receiving input from a user selecting a subset of the records on the surface map;  
analyzing an index to determine if the selected subset is shown in the second visual representation; and

altering the second visual representation based on the input, when the selected subset is shown in the second visual representation simultaneously with displaying the surface map.

14. (Original) The method of claim 13, wherein the three-dimensional surface map may be rotated in any of the three dimensions.

15. (Canceled)

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16. (Currently Amended) An apparatus for interactively displaying a set of records and their associated attributes, comprising:  
at least one memory having program instructions; and  
at least one processor configured to execute the program instructions to perform the operations of:

defining a set of graphic images, wherein each graphic image represents a range of values;

generating a first visual representation, the first visual representation being a surface map with the records of the set arranged along a first dimension and graphic images, representing a plurality of attributes associated with the records, arranged along a second dimension;

generating a second visual representation of a plurality of the records in the set;

displaying simultaneously the surface map and the second visual representation;

receiving input from a user selecting a subset of the records from the first surface map; and

analyzing an index to determine if one or more records in the selected subset are shown in another view; and

altering the second visual representation based on the input, when one or more records in the selected subset are shown in another view while simultaneously displaying the surface map and the second visual representation, wherein the graphic images are color-coded blocks.

17. (Currently Amended) An apparatus for interactively displaying a set of records and their associated attributes, comprising:

means for defining a set of graphic images, wherein each graphic image represents a range of values;

means for generating a first visual representation, the first visual representation being a surface map with the records of the set arranged along a first dimension and

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graphic images, representing a plurality of attributes associated with the records,  
arranged along a second dimension;

means for generating a second visual representation of a plurality of the records  
from the set;

means for simultaneously displaying the surface map and the second visual  
representation;

means for receiving input from a user selecting a subset of the records on the  
surface map;

means for analyzing an index to determine if one or more records in the selected  
subset are shown in another view; and

means for altering the second visual representation based on the input, when  
one or more records in the selected subset are shown in the second visual  
representation while simultaneously displaying the surface map and the second visual  
representation, wherein the graphic images are color-coded blocks.

18. (Canceled)